

## AMENDMENTS TO THE CLAIMS

It is respectfully requested that the claims be amended without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents. This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

1. (Previously presented) A method for increasing or maintaining the number of functional pancreatic islet cells in a pancreas of a human, wherein said pancreas is injured, damaged, or deficient in said pancreatic islet cells, said method comprising administering to said human a composition enriched in pluripotent cells that express the Hox11 gene.
2. (Currently amended) The method of claim 1, further comprising stimulating said ~~organ or tissue~~pancreas before administering said composition.
3. (Currently amended) The method of claim 2, wherein said ~~organ or tissue~~pancreas is stimulated by administering TNF-alpha.
4. (Currently amended) The method of claim 2, wherein said ~~organ or tissue~~pancreas is stimulated by administering a TNF-alpha agonist or a TNF-alpha inducing substance.
5. (Previously presented) The method of claim 4, wherein said TNF-alpha agonist or TNF-alpha inducing substance is Complete Freund's Adjuvant (CFA), ISS-ODN, microbial cell wall components with LPS-like activity, cholera particles, *E. coli* heat labile enterotoxin, *E. coli* heat labile enterotoxin complexed with lecithin vesicles, ISCOMS-immune stimulating complexes, polyethylene glycol, poly(N-2-(hydroxypropyl)methacrylamide), synthetic oligonucleotides containing CpG or CpA motifs, monophosphoryl lipid A, Bacillus Clamette-Guerin,  $\gamma$ -interferon, Tissue Plasminogen Activator, LPS, Interleukin-1, Interleukin-2, UV light, a lymphotoxin, cachectin, a TNFR-2 agonist, an intracellular mediator of the TNF-alpha

signaling pathway, a NFkB inducing substance, IRF-1, STAT1, a lymphokine, a tumor necrosis factor-alpha (TNF- $\alpha$ ) receptor II agonist, or the combination of TNF-alpha and an anti-TNFR-1 antibody.

6. (Original) The method of claim 5, wherein said TNF-alpha agonist or TNF-alpha inducing substance is Complete Freund's Adjuvant, Bacillus Clamette-Guerin, or  $\gamma$ -interferon.

7. (Currently amended) The method of claim 2, wherein said ~~organ or tissue~~pancreas is stimulated 6-12 hours before administering said composition.

8. (Original) The method of claim 1, wherein said composition is enriched in cells which do not express CD45 protein.

9. (Previously presented) The method of claim 8, wherein said pluripotent cells are enriched from the peripheral blood or tissue of a human by a method comprising: a) providing from the human peripheral blood or tissue that contains pluripotent cells; b) separating pluripotent cells from said peripheral blood or tissue; c) separating said pluripotent cells into a first cell population which expresses CD45 antigen on the surface of said cells and a second cell population which predominantly does not express CD45 antigen on the surface of said cells; and d) selecting said second cell population.

10. (Original) The method of claim 1, wherein said pluripotent cells are derived from the spleen.

11. (Original) The method of claim 1, wherein said pluripotent cells are semi-allogeneic.

12. (Original) The method of claim 1, wherein said pluripotent cells are isogenic.

13-29. (Canceled)

30. (Previously presented) The method of claim 1, wherein said composition comprises cells that present MHC class I and peptide, wherein said MHC class I has at least one allele that matches an MHC class I allele expressed by said human.

31-52. (Canceled)

53. (Previously presented) The method of claim 1, further comprising administering to said human an agent that selectively inhibits, removes, or kills cell populations that interfere or prevent the trafficking of, differentiation of, or growth of Hox-11-expressing pluripotent cells.

54. (Previously presented) The method of claim 53, wherein said cell populations comprise lymphocytes.

55. (Original) The method of claim 53, wherein said agent comprises TNF-alpha.

56. (Original) The method of claim 53, wherein said agent comprises a TNF-alpha agonist or a TNF-alpha inducing substance.

57. (Previously presented) The method of claim 56, wherein said TNF-alpha agonist or TNF-alpha inducing substance is Complete Freund's Adjuvant (CFA), ISS-ODN, microbial cell wall components with LPS-like activity, cholera particles, *E. coli* heat labile enterotoxin, *E. coli* heat labile enterotoxin complexed with lecithin vesicles, ISCOMS-immune stimulating complexes, polyethylene glycol, poly(N-2-(hydroxypropyl)methacrylamide), synthetic oligonucleotides containing CpG or CpA motifs, monophosphoryl lipid A, Bacillus Clamette-Guerin,  $\gamma$ -interferon, Tissue Plasminogen Activator, LPS, Interleukin-1, Interleukin-2, UV light, a lymphotoxin, cachectin, a TNFR-2 agonist, an intracellular mediator of the TNF-alpha signaling pathway, a NF $\kappa$ B inducing substance, IRF-1, STAT1, a lymphokine, a tumor necrosis factor-alpha (TNF- $\alpha$ ) receptor II agonist, or the combination of TNF-alpha and an anti-TNFR-1 antibody.

58. (Withdrawn) The method of claim 57, wherein said TNF-alpha agonist or TNF-alpha inducing substance is Complete Freund's Adjuvant, Bacillus Clamette-Guerin, or  $\gamma$ -interferon.

59. (Previously presented) The method of claim 1, wherein said human has an autoimmune disease.

60. (Original) The method of claim 59, wherein said disease is diabetes.

61-62. (Canceled)